

# LIGNOFUELS 2020

26-27 FEBRUARY 2020 // HELSINKI, FINLAND



## KEY TOPICS:

- Advanced Biofuels Market & Policy Overview
- Developments in Demo Plants for Commercial Scale Production
- Technological Developments for the Advanced Biofuels Industry
- Pretreatment of Lignocellulosic Feedstock: Methods & Analysis
- Ensuring Sustainable Production Through Holistic Utilisation of Feedstock
- Lignocellulosic Feedstock: Availability and Sustainability
- The Role of Lignofuels in Decarbonising Aviation
- Advanced Biofuels as a Solution for Shipping



## CONFIRMED SPEAKERS INCLUDE:



**Havard Wollan**  
CEO  
**Biokraft**



**Bart Hellings**  
Head of Innovation  
**Goodfuels**



**Patrick Pitkanen**  
Director Advanced Fuels  
**St1 Biofuels**



**Oskar Meijerink**  
Business Development Manager  
**SkyNRG**



**Panu Routasalo**  
Vice President  
**UPM Biofuels**



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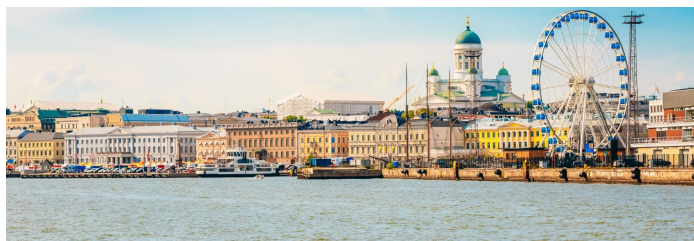


ACI's 10th Annual Lignofuels Conference will be taking place in Helsinki, Finland on the 26th & 27th February. The two day conference will bring together key industry stakeholders to discuss policy frameworks & innovative commercial technologies in the production of second and advanced generation biofuels and benefit from excellent networking opportunities with their senior peers.

## KEY AREAS OF FOCUS:

- Advanced Biofuels Market & Policy Overview
- Developments in Demo Plants for Commercial Scale Cellulosic Ethanol Production
- Technological Developments for the Advanced Biofuels Industry
- Pretreatment of Lignocellulosic Feedstock: Methods & Analysis
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- The Role of Lignofuels in Decarbonising Aviation
- Advanced Biofuels as a Solution for Shipping

## HOST CITY OF HELSINKI:



## ATTENDEES OF 2019 EDITION INCLUDED:

ABB \* Adven \* Air Liquide Global Management Services GmbH \* Alfa Laval Nordic \* Altri, SGPS, S.A. \* Celulose Beira Industrial (CELBI, S.A.) \* ANCAP \* ASG Analytik-Service GmbH \* Aviation Initiative For Renewable Energy In Germany (Aireg) \* Avinor \* BioGasol ApS \* Biokraft \* BioMCN B.V. \* Bioprocess Pilot Facility B.V. \* Borregaard \* Business Finland Oy \* Chempolis Oy \* CRI Catalyst Company \* Crystaphase \* Daily Thermetrics \* Distribuidora Uruguaya De Combustibles S.A. (DUCSA) \* Drax Group Plc \* Drivkraft Norge \* DSM Bio-based Products & Services B.V. \* Eco-1 Bioenergy AS \* Elfer \* Ekotrend Sp. Z O.o. \* Energiløsten AB \* Energochemica Trading A.s. \* Equinor ASA \* Essity Operations Mannheim GmbH \* European Commission DG ENERGY \* Enviral A.s. \* E4Tech (UK) Ltd \* Finnish Transport Safety Agency Trafic \* FPIInnovations \* Frier Vest AS \* GEA Finland Oy \* GEA Sweden AB \* Goodfuels \* Haldor Topsoe A/S \* IBB Netzwerk GmbH \* IISAB \* ILF Consulting Engineers Norway AS \* Infineum UK Ltd \* Ingenieurbüro Dr.-Ing. Georg Markowz \* International Energy Agency (IEA) \* Invest In Zeeland \* Iogen Corporation \* Japan Petroleum Energy Center (JPEC) \* Koole Terminals BV \* Kuwait Petroleum Research & Technology \* Laborelec Srl \* Lantmännen Agroetanol \* Leaf \* Mercer International Inc. \* Microbiogen Pty Ltd \* MoRe Research Örnköldsvik AB \* MOL Group \* Neste \* NIRAS \* Nopek Oy \* Nordic Storage AB \* NORSK ENERGI \* North European Oil Trade Oy \* Novox Oy \* Nynas AB \* Outotec (Finland) Oy \* Outotec Norway \* Paques Europe BV \* Pöryr Finland Oy \* Pöryr Norway \* Pöryr Sweden AB \* Preem AB \* RenFuel \* RISE Processum AB \* Roundtable on Sustainable Biomaterials (RSB) \* SCA Energy AB \* Scandinavian Tank Storage \* Scitech-Service Oy \* SEKAB E-Technology AB \* SGS Germany GmbH \* Shell - New Fuels \* Silver Green Fuel \* SINTEF Industry \* Södra Innovation & New Business \* SkyNRG \* St1 Renewable Energy Oy \* Steeper Energy Aps \* Stora Enso \* Sulzer Pumps Finland Oy \* SunCarbon AB \* SunPine AB \* Sustainable Fiber Technologies \* Sveaskog \* Synthos S.A. \* Total Refining & Chemicals \* Toyota Motor Europe \* TU Wien \* Universidad Autonoma Metropolitana \* UnoX Forsyning AS \* UPM The Biofore Company \* Veroniki Holding \* VITO NV.

## WHY JOIN US IN FINLAND?

Earlier this year The Finnish Parliament has approved a law that is set to see biofuels targets gradually increase for 2030. The new law has made for a world-leading advanced biofuels target of 10% in 2030.

Finnish parliament's approval of the law will increase the share of biofuels used in road traffic to 30% by 2029. The government has also approved a law that will allow for the distribution of bio-based light fuel oil. A share of all light fuel oil used that is intended for heating, construction machines and fitted motors, will be replaced by bio-based fuel oil starting from 2021.

[Emma Greedy, Biofuels International]

This is why following the success of last year's conference in Oslo which gathered over 150 senior level attendees and further highlighted the leading role of Scandinavian advanced biofuels industry within the EU/EEA, we are delighted to be bringing Lignofuels series back to Helsinki.

## WHO WILL YOU MEET AT THIS EVENT?

Technical, strategic & business development executives from advanced generation biofuels producers, oil refiners, process technology providers, enzyme developers, engineering firms & agribusiness as well as traders & brokers, automotive & aviation industries, financiers, investors, consultants & chemical companies.

## SPEAKING OPPORTUNITIES:

If you would like to be considered as a speaker for the event with a 30-45 minute presentation, please submit an abstract to [Isabella Brown](mailto:isabella.brown@acieu.net)

Tel: +44 (0)20 3141 0638 Email: [ibrown@acieu.net](mailto:ibrown@acieu.net)

## OPPORTUNITIES TO MEET YOUR TARGET AUDIENCE:



Showcase your technologies to the advanced biofuels industry, with opportunities to demonstrate the capabilities of your latest products and services. Companies can gain direct access to our senior level audience and have an increased level of visibility and exposure through branding and networking at the conference.

For information on available sponsorship and exhibition opportunities, please contact [Sam Cormack](mailto:sam.cormack@acieu.net)

Tel: +44 (0)20 3141 0626 / Email: [samc@acieu.net](mailto:samc@acieu.net)

## REGISTRATION IS SIMPLE:

If you would like to register for this event or wish to find out more information, please contact [Dimitri Pavlyk](mailto:dimitri.pavlyk@acieu.net)

Tel: +44 (0)20 3141 0627 / Email: [dpavlyk@acieu.net](mailto:dpavlyk@acieu.net)

## DAY 1

Wednesday 26th February 2020

08:00 REGISTRATION & COFFEE

09:00 CHAIRMAN'S OPENING REMARKS



**Erik C. Wormslev**  
Director Innovation  
**NIRAS**

### SESSION ONE

#### Advanced Biofuels Market & EU Policy Overview

09:15

#### Making Future – lignofuels market overview & key drivers

- Increasing supply of lignofuels through political drive and investment in technology



**Esa Sipila**  
Head of Biofuels  
**AFRY**

09:45

#### Finland's targets and policies for biofuels and advanced biofuels

- National energy and climate targets
- Policy instruments in transportation sector
- The RED II implementation



**Harri Haavisto**  
Senior Specialist, Energy Department  
**Ministry of Economic Affairs and Employment, Finland**

10:15

#### Panel Q&A

10:30

### CONFERENCE PRESENTATION

#### Learnings from the commercial scale up of the industry and expectations going forward?

- Main learnings on what matters when moving from demo to full scale plants
- Onsite versus offsite enzyme discussion
- Main trends and main to do's for the industry to succeed



**Carlos Ocampo**  
Global Business Director,  
Biomass  
**Novozymes**

11:00

#### MORNING REFRESHMENTS SPONSORED BY:



## SESSION TWO

### Developments in Plants for Commercial Scale Cellulosic Ethanol Production

11:30

#### sunliquid® - Bringing cellulosic ethanol to scale

- Decarbonizing mobility: market requirements
- Advanced biofuels: global/ EU legislation support mechanisms
- The sunliquid® story: commercial project developments in Europe



**Dr. Gloria Gaupmann**  
Head of Public Affairs, Group  
Technology & Innovation  
**Clariant**

12:00

#### Presentation title to be announced



**Patrick Pitkanen**  
Director Advanced Fuels  
**St1 Biofuels**

12:30

#### Bioethanol as important part of the sustainable biorefinery

- Learnings, strengths and future challenges regarding commercial production of bioethanol from a process stream in the wood based biorefinery
- Strengths
- Challenges
- Future



**Kristina Elg Christoffersson**  
Technology Manager  
**Domsjö Fabriker**

13:00

#### Panel Q&A

13:20

## LUNCH

## SESSION THREE

### Technological Developments for the Advanced Biofuels Industry

14:20

#### Perspectives and insights into thermochemical conversion processes

- Introduction to Neste and its' strategic intent relating to innovations in lignocellulosics
- Review of the major thermochemical conversion processes from a historical perspective
- Insights into unique challenges concerning biomass conversion to hydrocarbon fuels



**Steven Gust**  
Fellow - Lignocellulosic Fuels,  
Innovation  
**Neste**

14:50

## Reactors & filtration for biofuels processes

- OKTOP bioreactor for large scale bioprocessing
- PF-DS automated discharge of sticky filter cakes
- Optimal cake washing for difficult materials



**Oskar Sieking**  
Business Manager Filters  
**Outotec**

15:20

## Fuel production from solid waste biomass – a perspective from hydroprocessing

- How to make sure that feedstocks can be hydrotreated
- Oxygen content and the impact of contaminants on hydroprocessing
- From pilot plant to full scale – where are the obstacles?



**Mikala Grubb**  
Senior Business Development  
Manager, Refinery  
**Haldor Topsoe**

15:50

## Panel Q&A

16:10

## AFTERNOON REFRESHMENTS

16:40

## CONFERENCE PRESENTATION

### DNS biofuels production technology

- DNS research & development
- DNS production principle
- DNS product and its quality aspects



**Ing. Martin Stranak**  
Manager of PR &  
Communication  
**Aikona**

17:00

## CONFERENCE PRESENTATION

### Futuro!™: your one-way ticket to the 2G world

- Representative Biomass pretreatment plant operation: standardization as the key to flexibility
- Updates on Futuro! technology
- What's next?



**Frédéric Balligand**  
Renewables Business  
Development Director  
**Axens**

## SESSION FOUR

### Sustainable Production of Lignocellulosic Biomass into Biofuel

#### Ensuring Sustainable Production Through Holistic Utilisation of Feedstock

- Make more from less. Feedstock utilization is key to success.
- The World's first Bio-methanol plant using lignocellulosic feedstock.
- Is there a future in Carbon Capture and Utilization from biorefineries?



**Henrik Brodin**  
Strategic Business Development  
Manager  
**Södra**

17:30

18:00

#### Presentation title to be announced



**Michael Hecquet**  
BioTfuel R&D coordinator  
**TOTAL RC on behalf of Bionext**

18:30

#### Panel Q&A

18:45

## CLOSE OF DAY ONE

## DAY 2

Thursday 27th February 2020

08:30

## REGISTRATION & COFFEE

09:00

## CHAIRMAN'S OPENING REMARKS



**Erik C. Wormslev**  
Director Innovation  
**NIRAS**

## SESSION SIX

### Lignocellulosic Feedstock: Availability and Sustainability

#### Climate Positive Fuels – new opportunities in advanced biofuels

- Climate positive fuels as a driver for carbon neutrality
- Opportunities with new feedstock
- New applications of renewable hydrocarbons



**Panu Routasalo**  
Vice President  
**UPM Biofuels**

09:05

09:35

## Dealing with long-term feedstock supply: costs and potential improvements

- Overview of the feedstock supply base in Europe
- Understand variability of cost factors and potential advancements
- Estimate profitability for cropped based feedstock in arable and unused land
- Analyse perspectives for future improvements by either increasing crop yields through improved practices or producing more feedstock in unused land, using sustainable practices.



**Calliope Panoutsou**  
Senior Research Fellow  
Imperial College

10:05

## Opportunities for feedstock supply from unused lands

- Where are unused lands in Europe and what are their main characteristics regarding extend, marginality conditions, socio-economic characteristics?
- What are the reasons for these lands to become unused?
- What are opportunities and constraints for bringing these lands back into use for the production of feedstock for biofuels?



**Berien Elbersen**  
Senior Researcher  
Wageningen University & Research

10:35

## Panel Q&A

10:55

## MORNING REFRESHMENTS SPONSORED BY:

**Outotec**

11:25

## CONFERENCE PRESENTATION

### REDII: Implications for the lignofuels industry

- RED II - new sustainability requirements for solid biomass
- Future challenges for lignofuels producers
- GRAS as a tool to use remote sensing data for sustainability certification



**Peter Hawighorst**  
Senior Project Manager  
GRAS

11:55

## CONFERENCE PRESENTATION

### The Role of Lignofuels in Decarbonising Aviation

- Supporting the development of bio-derived jet fuel
- Update on aviation policy and impact of tight specifications on price of fuel



**Oskar Meijerink**  
Business Development Manager  
SkyNRG

12:40

## PANEL DISCUSSION

### A Wider Look at Alternative Fuels for Carbon Reduction

- Examining recent innovations in the alternative fuels industry
- Addressing pros & cons of various advanced fuels and how lignofuels compare
- Reviewing alternatives including Power to X and EV



**Erik C. Wormslev**  
Director Innovation  
NIRAS

13:25

## LUNCH

14:25

## CONFERENCE PRESENTATION

### Four Different Stages of Piloting, and How to Identify Them

- Piloting is frequently considered a single stage in the maturation of a process, but piloting itself consists of multiple stages, each with their own goals
- This presentation will explain the different stages, and will explain the balance between reducing costs and reducing risks of piloting



**Raimo van der Linden**  
Business Development Manager  
BPF (Bioprocess Pilot Facility)



## SESSION SEVEN

### Advanced Biofuels as a Solution for Shipping

14:55

**Bringing alternative sustainable biofuels to the marine market - case study**



**Bart Hellings**  
Head of Innovation  
**GoodFuels**

15:25

### Green shipping with advanced biofuels

- What are the available solutions for green shipping?
- Global trends in green shipping
- LBG+LNG as a solution for green shipping



**Håvard Wollan**  
CEO  
**Biokraft**

15:55

### Panel Q&A

16:10

### CHAIRMAN'S CLOSING REMARKS



**Erik C. Wormslev**  
Director Innovation  
**NIRAS**

16:20

### END OF CONFERENCE & AFTERNOON REFRESHMENTS



GOOD SPIRIT! THE EVENT IS GROWING  
AND GETTING BETTER EVERY YEAR!

**ST1**

GREAT EVENT, GOOD DISCUSSION AND  
POSITIVE VIBES! LETS ROCK THE WORLD  
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Netherlands in Sweden**

IT'S DEFINITELY ONE OF THE EVENTS WE KEEP  
COMING BACK TO WITH GREAT PLEASURE  
AND ALWAYS TAKE INTERESTING  
KNOWLEDGE AND CONTACTS HOME.

THANKS!  
**Goodfuels**

THE CONFERENCE WAS VERY WELL  
ATTENDED WITH INFLUENTIAL PLAYERS IN THE  
BIOFUEL SPACE => EXCELLENT VALUE FOR  
MONEY AND TIME **Energy** INVESTED  
**Steeper**

## REGISTRATION IS SIMPLE

If you would like to register for this event or wish to find out more information, you can contact **Dimitri Pavlyk** using any of the following methods:

☎ +44 (0) 20 3141 0627

@ [dpavlyk@acieu.net](mailto:dpavlyk@acieu.net)

www <http://www.acius.net>

🏠 Postal Address: ACI Europe, 10 Gough Square, London, EC4A 3DE, UK

Conference Pass (Includes Access to All Documentation)  
26th–27th February 2020

£1,695.00  
(ex.Vat)

Documentation Packet Only

£470.00

### Please Note:

Members and customers of all supporting organizations are entitled to a discount off their conference package.

For more information please call Dimitri on +44 (0) 20 3141 0627.

## DOCUMENTATION PACKET

You can purchase the Lignofuels 2020 papers at just £445 (+£25 P&P). Simply tick the box on the booking form, send it with payment and your copy will be on its way to you after the meeting.

This important manual will be a source of invaluable reference for the future.

## ABOUT ACI:

ACI, a UK owned company, has been running successful conferences in the USA since 1999. Headquartered in Chicago with offices all around the States, ACI opened its European head office at the end of 2005 and has expanded rapidly, launching a series of events in key industries including maritime, energy, oil & gas, cosmetics, chemicals & media.

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## CONFERENCE VENUE:

**Hotel Kamp**



Pohjoisesplanadi 29

00100, Helsinki

## TERMS & CONDITIONS

### Payment

Payment must be received within five business days of returning the signed contract. After receiving payment a VAT receipt will be issued. If you do not receive a letter outlining details two weeks prior to the event, please contact the Conference Coordinator at ACI Europe Ltd.

Discounts are available for multiple/group bookings. Please call Dimitri Pavlyk on +44 (0) 20 3141 0627 for more information.

### Cancellations

Substitutions are welcome up to 24 hours prior to the event. Cancellations must be received in writing no less than 3 weeks prior to the start of the conference; a full credit voucher towards a future ACI conference will be issued. Any cancellation received less than 3 weeks prior to the start of the event shall be deemed to be a breach of this contract by client, and accordingly, no credits will be given. Cancellations must be received in writing by mail or fax three weeks before the conference. Thereafter the full conference fee is payable. If for any reason ACI Europe Ltd decides to amend, cancel or postpone this conference, the conference fee will not be refunded. Furthermore, ACI Europe Ltd will not be responsible for covering airfare, hotel or other costs incurred by registrants. In the event that ACI Europe Ltd cancel or postpone the event, ACI Europe Ltd reserves the right to transfer this booking to another conference to be held in the following twelve months, or to provide a credit of an equivalent amount to another conference within the following twelve months. The construction, validity and performance of this agreement shall be governed in all respects by the laws of England to the exclusive jurisdiction of whose courts the Parties hereby agree to submit.

### Accommodation

The cost of accommodation is not included in the event fee. Preferential rates will be arranged with or near the event venue, and all confirmed delegates will be given details of how to book accommodation at this rate in due course.